



Access Grid Networking

Chautauqua 2K: Minimizing Risk

Bill Nickless



Chautuaqua 2K is a Large Scale Networking Event

- Get campus network folks involved EARLY and OFTEN
- Run beacons continuously
- Steps to take before falling back to ANL Bridges



Campus Networking

- Campus Network folks are always overworked, usually scarred, and rightfully conservative (*Argonne History*)
- Beacon technology is key:
 - Demonstrate the reality of multicast deployment
 - Help give immediate feedback on changes
 - Watch how stable the routing is
- Management communication to Campus Networking
- Do Not Wait until the last minute to make it work
- Invite them to join the Waterfall Glen MOO
- Ask them to provide Read-Only Access to routers
- Argonne, NCSA, and other people are eager to help



Why Run a Beacon?

- Multicast Routing requires active sources to test
- Multicast Routing can fail over time (known bugs)
- Wide area networks (Abilene, vBNS, ESNet) need to see the effect of changes they make
- Campus networking folks need to see how effective (or not) their configuration is working
- You need to see whether your multicast is working



What if multicast breaks?

- Use the back channel. During Chautauquas, networking staff will be online, primed to help.
- Have your local campus networking people on call (telephone, pager, cell phone) in case the problem turns out to be in your campus network.
- Try to give the network people 5-10 minutes to resolve the problem before doing anything yourself. Stopping your source makes it impossible to debug!
- After 10 minutes of quick effort, an Argonne bridge slot will be created for you while network debugging continues. Be prepared to switch back at a break.



Multicast Resources

- RTP statistics (VIC, RTPMON)
- Run the Beacon!
- Bill Nickless (Argonne) and Tony Rimovsky (NCSA) are willing to do whatever it takes to get IP Multicast working at your site.
- Use the Beacon Viewer!
- If you have IP available, we can get Multicast to work.
- Check that your Beacon is running!
- “Roll Your Own” if your campus network can’t move on your schedule.